

CLAIMS

1. A location service system, comprising:

a Global Positioning System (GPS) receiver, comprising:

a first data path for correlating an incoming GPS signal with a locally generated

5 signal;

a second data path for verifying the incoming GPS signal against a lock signal,

the second data path determining whether the incoming GPS signal has at least one characteristic which differentiates the incoming GPS signal from an auto-correlated signal and a cross-correlated signal;

10 a data path executive for monitoring the first data path and, when the incoming GPS signal does not contain the at least one characteristic, for continuing to search for a second incoming GPS signal; and

means for informing a user of the location services system the position of the GPS receiver.

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2. The location services system of claim 1, wherein the at least one characteristic is a predetermined signal strength of the incoming GPS signal.

3. The location services system of claim 1, wherein the at least one characteristic is a
20 predetermined Signal-to-Noise Ratio (SNR) of the incoming GPS signal.

4. The location services system of claim 1, wherein the at least one characteristic is selected from a group comprising a correlation to a different satellite code being stronger than

the correlation to a desired satellite code, and a correlation to a different delay of the incoming
25 CDMA signal being stronger than the correlation to the first data path's locally generated code
delay.

5. The location services system of claim 1, wherein the data path executive changes
a generation rate of the locally generated signal.

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6. The location services system of claim 5, wherein the at least one characteristic is a
predetermined signal strength of the incoming GPS signal.

7. The location services system of claim 5, wherein the at least one characteristic is a
35 predetermined Signal-to-Noise Ratio (SNR) of the incoming GPS signal.

8. The location services system of claim 1, wherein the means for informing
comprises a visual display.

40 9. The location services system of claim 8, wherein the visual display illustrates a
map.

10. The location services system of claim 9, wherein the map shows a location of the
GPS receiver on the map.

45 11. The location services system of claim 30, wherein the map further shows a
predetermined destination.

12. The location services system of claim 31, wherein the map further shows at least part of a route between the location of the GPS receiver and the predetermined destination.

50 13. A Global Positioning System (GPS) receiver, comprising:
a first data path for correlating an incoming GPS signal with a locally generated signal;
a second data path for verifying the incoming GPS signal against a lock signal,
the second data path determining whether the incoming GPS signal has at least one characteristic
55 which differentiates the incoming GPS signal from a correlated signal, wherein the correlated
signal is selected from a group comprising an auto-correlated signal and a cross-correlated
signal; and
a data path executive for monitoring the first data path and for continuing to
search for a second incoming GPS signal when the incoming GPS signal does not contain the at
60 least one characteristic.

14. The GPS receiver of claim 13, wherein the at least one characteristic is a predetermined signal strength of the incoming GPS signal.

65 15. The GPS receiver of claim 13, wherein the at least one characteristic is a predetermined Signal-to-Noise Ratio (SNR) of the incoming GPS signal.

16. The GPS receiver of claim 13, wherein the at least one characteristic is selected from a group comprising a correlation to a different satellite code being stronger than the

70 correlation to a desired satellite code, and a correlation to a different delay of the incoming
CDMA signal being stronger than the correlation to the first data path's locally generated code
delay.

17. The GPS receiver of claim 16, wherein the GPS receiver receives data from a
75 source outside of the incoming GPS signal.

18. The GPS receiver of claim 17, wherein the data is selected from a group
comprising: time information, ephemeris information, and coarse position information.

80 19. The GPS receiver of claim 18, wherein the GPS receiver is integrated with a
wireless transceiver.

20. The GPS receiver of claim 19, wherein the data is selectively used by the GPS
receiver to determine the geoposition of the GPS receiver.

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